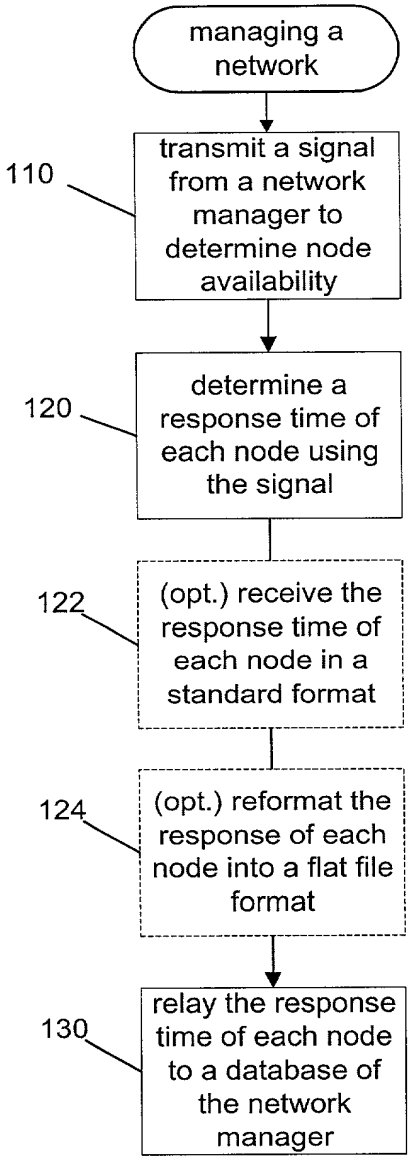
managing a network
transmit a signal from a network manager to determine node availability
110
determine a response time of each node using the signal
120
(opt.) receive the response time of each node in a standard format
122
(opt.) reformat the response of each node into a flat file format
124
relay the response time of each node to a database of the network manager
130

FIG. 1A

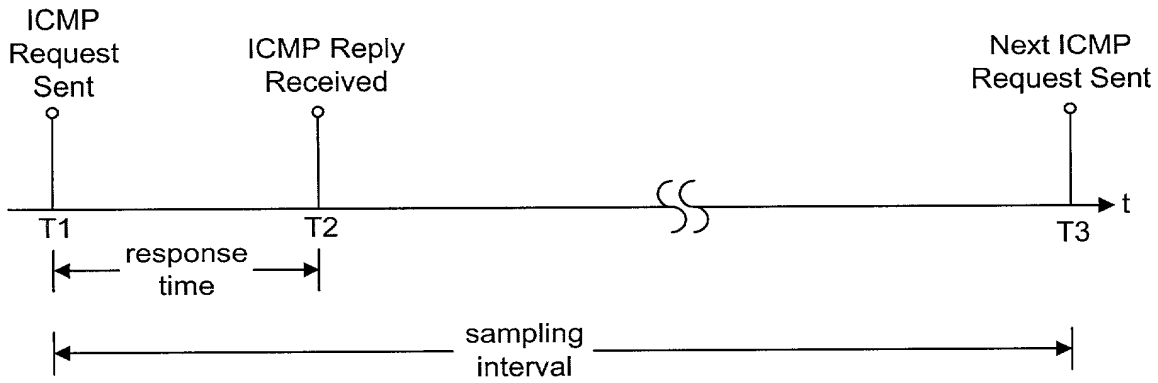
ICMP Request Sent
ICMP Reply Received
Next ICMP Request Sent
t
T1
T2
T3
response time
sampling interval

FIG. 1B

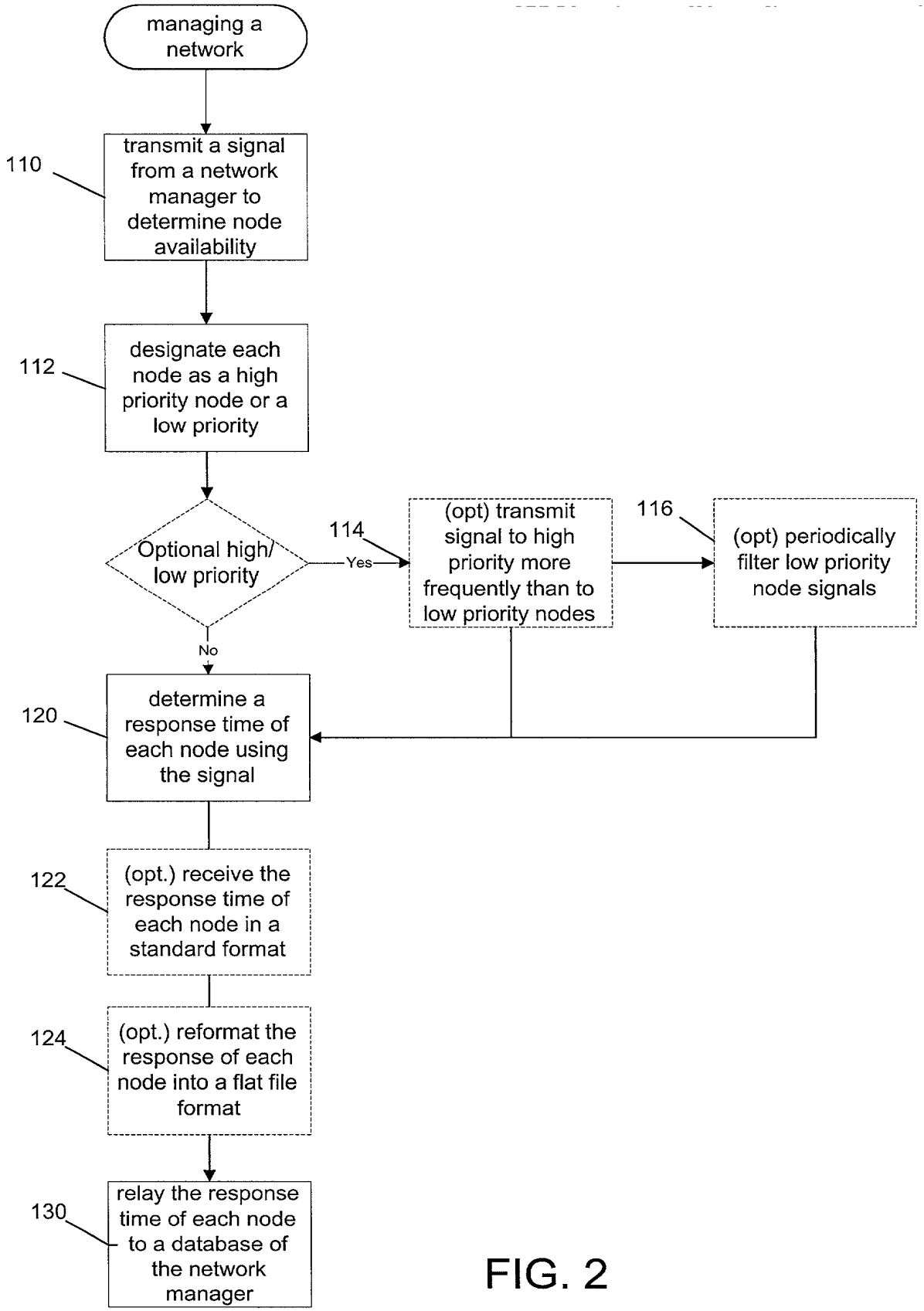
managing a network
110
transmit a signal from a network manager to determine node availability
112
designate each node as a high priority node or a low priority
Optional high/ low priority
114
Yes
(opt) transmit signal to high priority more frequently than to low priority nodes
116
(opt) periodically filter low priority node signals
No
120
determine a response time of each node using the signal
122
(opt.) receive the response time of each node in a standard format
124
(opt.) reformat the response of each node into a flat file format
130
relay the response time of each node to a database of the network manager

FIG. 2

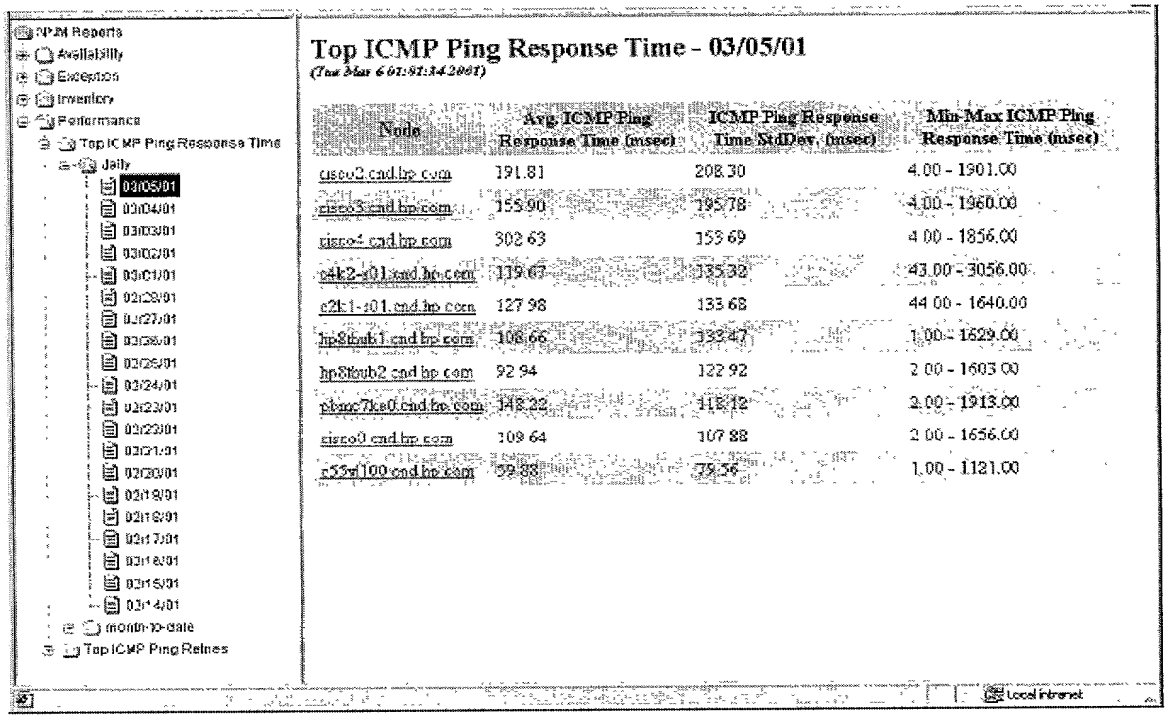
NPM Reports
Availability
Exception
Inventory
Performance
Top ICMP Ping Response Time
Daily
03/05/01
03/04/01
03/03/01
03/02/01
03/01/01
02/28/01
02/27/01
02/26/01
02/25/01
02/24/01
02/23/01
02/22/01
02/21/01
02/20/01
02/19/01
02/16/01
02/17/01
02/16/01
02/15/01
02/14/01
month-to-date
Top ICMP Ping Reines
Top ICMP Ping Response Time - 03/05/01
(Tue Mar 6 01:01:34 2001)
Node
Avg ICMP Ping Response Time (msec)
ICMP Ping Response Time StdDev. (msec)
Min-Max ICMP Ping Response Time (msec)
cisco2.cnd.hp.com 191.81 208.30 4.00 - 1901.00
cisco3.cnd.hp.com 155.90 195.78 4.00 - 1960.00
cisco4.cnd.hp.com 302.63 159.69 4.00 - 1856.00
c4k2-s01.cnd.hp.com 119.67 135.32 43.00 - 3056.00
c2k1-s01.cnd.hp.com 127.98 133.68 44.00 - 1640.00
hp8hub1.cnd.hp.com 108.66 132.47 1.00 - 1629.00
hp8hub2.cnd.hp.com 92.94 122.92 2.00 - 1603.00
c4-mc7k-s0.cnd.hp.com 148.22 118.12 3.00 - 1913.00
cisco0.cnd.hp.com 109.64 107.88 2.00 - 1656.00
r52-s100.cnd.hp.com 59.88 79.56 1.00 - 1121.00
Local intranet

FIG. 3

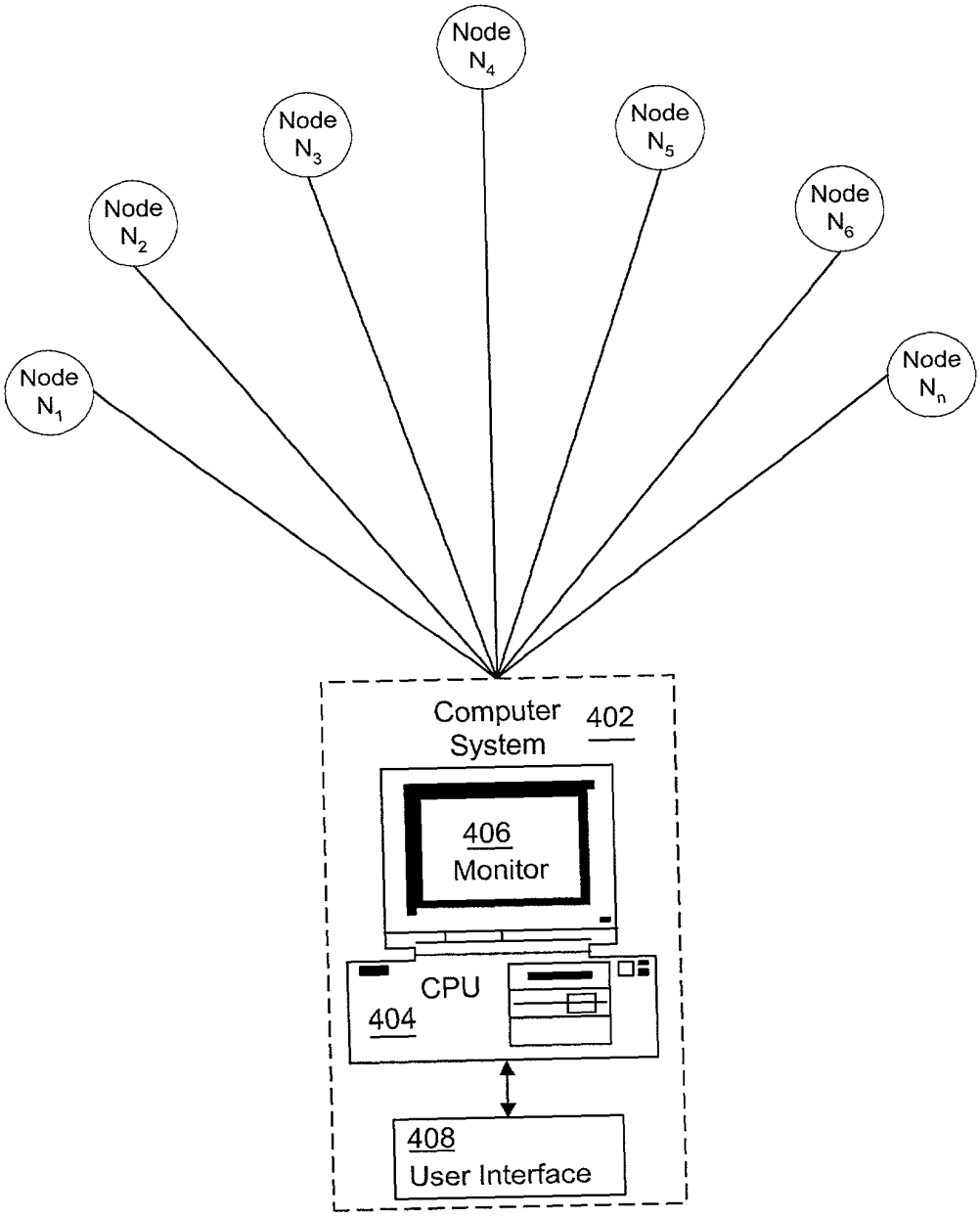

FIG. 4

APPLN. FILING DATE: APRIL 24, 2001
TITLE: METHOD AND SYSTEM FOR MONITORING NODE RESPONSE TIME
INVENTOR(S): JEFFREY R. CONRAD ET AL.
APPLICATION SERIAL NO: UNASSIGNED